

Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

October 10, 2014

GE Healthcare % Mr. Bryan Behn Regulatory Affairs Manager 9900 Innovation Drive WAUWATOSA WI 53226

Re: K142160

Trade/Device Name: LOGIQ E9 Diagnostic Ultrasound System

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYN, IYO, ITX Dated: September 29, 2014 Received: September 30, 2014

Dear Mr. Behn:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

This determination of substantial equivalence applies to the following transducers intended for use with the LOGIQ E9 Diagnostic Ultrasound System, as described in your premarket notification:

### Transducer Model Number

3CRF	3CRF-D	6S-D	6Tc
9L-D	11L-D	C1-5-D	IC5-9-D
L8-18i-D	M4S-D	M5S-D	M6C-D
ML6-15-D	P2D	P6D	RAB2-5D
RAB4-8-D	RIC5-9-D	RNA5-9-D	RSP6-16-D
S1-5	S4-10	S4-10-D	C2-9-D
RAB6-D	S1-5-D	C1-6-D	C2-9VN-D

C1-6VN-D

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638 2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<u>http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</u> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Janine M. Morris

Director

Division of Radiological Health

Office of In Vitro Diagnostics and Radiological Health

Center for Devices and Radiological Health

for

Enclosure

### DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

### **Indications for Use**

Form Approved: OMB No. 0910-0120 Expiration Date: January 31, 2017 See PRA Statement below.

510(k) Number (if known)	
K142160	
Device Name LOGIQ E9	
Indications for Use (Describe) The device is intended for use by a qualified physician for ultrasor Organ (breast, testes, thyroid); Neonatal Cephalic; Adult Cephalic Musculo-skeletal Conventional and Superficial; Urology (including and Intraoperative (abdominal, thoracic and vascular).	; Cardiac (adult and pediatric); Peripheral Vascular;
Type of Use (Select one or both, as applicable)  Prescription Use (Part 21 CFR 801 Subpart D)	Over-The-Counter Use (21 CFR 801 Subpart C)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

CONTINUE ON A SEPARATE PAGE IF NEEDED.

#### \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 Ultrasound System

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation										
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest											
Ophthalmic [7]	+	_	_	_	_		_	_	_		
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	P	Р	Р	Р	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9,10]
Pediatric	Р	Р	Р	Р	Р	Р	P	Р	Р	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9,10]
Neonatal Cephalic	Р	Р	Р	Р	Р	Р	P	Р	Р	Р	[5,6,9]
Adult Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Cardiac Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Peripheral Vascular	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Superficial	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Other <sup>[4]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Transrectal	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Transvaginal	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Transurethral											
Intraoperative <sup>[8]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development, Gyn
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [10] Shear wave elastography
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 3CRF Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

		Mode of Operation									
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics[7]	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 3CRF-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	_										
Clinical Application		Mode of Operation									
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Е	Е	Е		Е	E	E	E	E	Е	[5,6,9]
Abdominal <sup>[1]</sup>	Е	Е	Е		Е	E	E	E	E	Е	[5,6,9]
Pediatric	Е	Е	Е		Е	Е	Е	Е	E	Е	[5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Е	Е	Е		Е	Е	Е	E	E	Е	[5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 6S-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation											
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]	
Anatomy/Region of Interest			<del> </del>	• • •								
Ophthalmic												
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	P	Р	Р	Р	Р		
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р		
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р		
Small Organ <sup>[2]</sup>												
Neonatal Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р		
Adult Cephalic												
Cardiac Adult												
Cardiac Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р		
Peripheral Vascular												
Musculo-skeletal Conventional												
Musculo-skeletal Superficial												
Other <sup>[4]</sup>												
Exam Type, Means of Access												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative <sup>[8]</sup>				<u>'</u>								
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 6Tc Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

OI: : I.A. I: ::		Mode of Operation									
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics[7]											
Abdominal <sup>[1]</sup>											
Pediatric											
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 9L-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

0" : 14 " "						Mode of	Operation	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9,10]
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	P	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Superficial	Р	Р	Р		Р	Р	P	Р	Р	Р	[3,5,6,9]
Other <sup>[4]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [10] Shear wave elastography
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with 11L-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

011 1 1 4 11 11	Mode of Operation										
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest	<u> </u>		Боррісі	Боррісі	Боррісі	Боррісі	Боррісі	Wioucs	iiiagiiig	i uise	[IVOICO]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>											
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	P	P	P	Р	[3,5,6]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]
Small Organ <sup>[2]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]
Musculo-skeletal Superficial	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic						·					·

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with C1-5-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

		Mode of Operation									
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	P	Р	Р	Р	Р	[E C O]
Abdominal <sup>[1]</sup>	1		1					P		1	[5,6,9]
	P	Р	Р	P	P	P	P		P	P	[5,6,9]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic				_							

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with IC5-9-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

011 1 1 1 11		Mode of Operation									
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest			Dopplei	Dobbiei	Dopplei	Dopplei	Dopplei	Modes	iiiagiiig	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р		Р	Р	P	P	P	Р	[5,6,9]
Abdominal <sup>[1]</sup>											
Pediatric											
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Transvaginal	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development, Gyn
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.

System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with L8-18i-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	Operatio	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>											
Abdominal <sup>[1]</sup>											
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Neonatal Cephalic	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6,9]
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Superficial	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with M4S-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	f Operation	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	P	Р	P	Р	Р	Р	Р	[E C]
Abdominal <sup>[1]</sup>	+		1 -				_				[5,6]
	P	P	P	P	P	P	P	P	P	P	[5,6]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>	1		-								
Neonatal Cephalic			1								
Adult Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	P	Р	
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with M5S-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	f Operatio	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics[7]	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[9]
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Cardiac Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with M6C-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Olivia de Arradia di Cara						Mode of	Operatio	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics[7]	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.

System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with ML6-15-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	Operatio	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>											
Abdominal <sup>[1]</sup>											
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Neonatal Cephalic	Р	Р	Р		Р	Р	Р	Р	Р	Р	[9]
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Superficial	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6,9]
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with P2D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

					Mode of	Operatio	n			
В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
		Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse*	[Notes]
		Р	Р							
		Р	Р							
		Р	Р							
		Р	Р							
			-							
			P P P	P P P P P P P P P P P P P P P P P P P	P P P P P P P P P P P P P P P P P P P	B M PW CW Color Doppler Color M Doppler  P	B M PW Doppler CW Doppler Color M Doppler Dopp	Doppler Doppler Doppler Doppler Doppler Modes  Doppler Doppler Doppler Doppler Modes  Doppler Doppler Doppler Doppler Doppler Modes	B M PW Doppler CW Doppler Color Doppler Doppler Doppler Combined Imaging    Power Doppler Doppler Doppler Doppler Combined Imaging	B M PW Doppler Color Doppler Doppler Doppler Doppler Color Modes' Imaging Coded Pulse'  P P P P P P P P P P P P P P P P P P P

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with P6D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

011 1 1 1 11						Mode of	Operation	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse▶	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>											
Abdominal <sup>[1]</sup>											
Pediatric											
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic			Р	Р							
Cardiac Adult			Р	Р							
Cardiac Pediatric			Р	Р							
Peripheral Vascular			Р	Р							
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RAB2-5D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	Operation	n			
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest			2 оррго:	2 орр.о.	Борріо.	2 oppio.	2 0 0 0 1			1 0.00	[
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	P	Р	Р	Р	[5,6]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RAB4-8-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	_										
Clinical Application						Mode of	Operatio	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RIC5-9-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	Operatio	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>											
Pediatric											
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р	Р	Р	Р	P	P	P	Р	[3,5,6]
Exam Type, Means of Access											
Transesophageal											
Transrectal	Р	Р	Р	Р	Р	Р	Р	Р	P	Р	[3,5,6]
Transvaginal	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6]
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development, Gyn
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RNA5-9-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	_										
Oliniaal Annliaation						Mode of	Operatio	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Neonatal Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5]
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Musculo-skeletal Conventional	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6]
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic				_							

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RSP6-16-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation  B M PW CW Color Color M Power Combined Harmonic Coded Other  B Depoler Depoler Depoler Depoler Medicing Investigation Depoler Investiga											
Clinical Application	В	М										
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]	
Ophthalmic												
Fetal/Obstetrics <sup>[7]</sup>												
Abdominal <sup>[1]</sup>												
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]	
Small Organ <sup>[2]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]	
Neonatal Cephalic												
Adult Cephalic												
Cardiac Adult												
Cardiac Pediatric												
Peripheral Vascular	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]	
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]	
Musculo-skeletal Superficial	Р	Р	Р		Р	Р	Р	Р	Р	Р	[3,5,6]	
Other <sup>[4]</sup>												
Exam Type, Means of Access												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative <sup>[8]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р		
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.

System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with S1-5 Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	f Operation	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic  Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	P	Р	P	Р	Р	Р	Р	[E C O]
	+		1 -				_		<u> </u>	<b>-</b>	[5,6,9]
Abdominal <sup>[1]</sup>	P	P	P	P	P	P	P	P	P	P	[5,6,9]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	P	Р	[5,6,9]
Small Organ <sup>[2]</sup>	-							-			
Neonatal Cephalic											
Adult Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	P	Р	
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with S4-10 Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

011 1 1 4 11 11	Mode of Operation												
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]		
Anatomy/Region of Interest				- ''	- ' '				0 0				
Ophthalmic													
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]		
Abdominal <sup>[1]</sup>	Р	Р	Р	P	Р	P	P	P	Р	Р	[5,6,9]		
Pediatric	Р	Р	Р	Р	Р	Р	P	Р	Р	Р	[5,6,9]		
Small Organ <sup>[2]</sup>	Р	Р	Р	Р	Р	Р	P	Р	P	Р	[5,6,9]		
Neonatal Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]		
Adult Cephalic													
Cardiac Adult													
Cardiac Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р			
Peripheral Vascular													
Musculo-skeletal Conventional													
Musculo-skeletal Superficial													
Other <sup>[4]</sup>													
Exam Type, Means of Access													
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intraoperative <sup>[8]</sup>													
Intraoperative Neurological													
Intravascular													
Laparoscopic													

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with S4-10-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

011 1 1 4 11 11	Mode of Operation												
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]		
Anatomy/Region of Interest				- ''	- ' '				0 0				
Ophthalmic													
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]		
Abdominal <sup>[1]</sup>	Р	Р	Р	P	Р	P	P	P	Р	Р	[5,6,9]		
Pediatric	Р	Р	Р	Р	Р	Р	P	Р	P	Р	[5,6,9]		
Small Organ <sup>[2]</sup>	Р	Р	Р	Р	Р	Р	P	Р	Р	Р	[5,6,9]		
Neonatal Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]		
Adult Cephalic													
Cardiac Adult													
Cardiac Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р			
Peripheral Vascular													
Musculo-skeletal Conventional													
Musculo-skeletal Superficial													
Other <sup>[4]</sup>													
Exam Type, Means of Access													
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intraoperative <sup>[8]</sup>													
Intraoperative Neurological													
Intravascular													
Laparoscopic													

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with C2-9-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Olivia di Assalia di G						Mode of	Operatio	n			
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.

System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with RAB6-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	_										
Clinical Application						Mode of	Operatio	n			
Clinical Application	В	М	PW	CW	Color	Color M	Power	Combined	Harmonic	Coded	Other
Anatomy/Region of Interest			Doppler	Doppler	Doppler	Doppler	Doppler	Modes*	Imaging	Pulse	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Abdominal <sup>[1]</sup>	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Pediatric	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional	Р	Р	Р		Р	Р	Р	Р	Р	Р	[5,6]
Musculo-skeletal Superficial											
Other <sup>[4]</sup>											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.

System provides real-time 3D and 4D acquisition when used with special 4D probes

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# Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with S1-5-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation												
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]		
Ophthalmic  Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	P	Р	P	Р	Р	Р	Р	[E C O]		
	+		1 -				_		<u> </u>	<b>-</b>	[5,6,9]		
Abdominal <sup>[1]</sup>	P	P	P	P	P	P	P	P	P	P	[5,6,9]		
Pediatric	Р	Р	Р	Р	Р	Р	Р	Р	P	Р	[5,6,9]		
Small Organ <sup>[2]</sup>	-							-					
Neonatal Cephalic													
Adult Cephalic	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[5,6,9]		
Cardiac Adult	Р	Р	Р	Р	Р	Р	Р	Р	P	Р			
Cardiac Pediatric													
Peripheral Vascular													
Musculo-skeletal Conventional													
Musculo-skeletal Superficial													
Other <sup>[4]</sup>													
Exam Type, Means of Access													
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intraoperative <sup>[8]</sup>													
Intraoperative Neurological													
Intravascular													
Laparoscopic													

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form **GE LOGIQ E9 with C1-6-D Transducer**

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

intended Ose. Diagnostic	l	ound	magin	g or man	2 110W C				dy do lo	110 000	
Clinical Application							Operatio				
• •	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest	1		Dobbiei	Dobbiei	Dobbiei	Dopplei	Dopplei	Modes	illiagilig	ruise	[Notes]
Ophthalmic											
Fetal/Obstetrics <sup>[7]</sup>	Р	Р	Р	Р	Р	Р	Р	P	P	Р	[5,6,9]
Abdominal <sup>[1]</sup>	Р	Р	Р	Р	Р	Р	Р	P	P	Р	[3,5,6,9,10]
Pediatric	Р	Р	Р	Р	Р	Р	Р	P	P	Р	[3,5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

- Notes: [1] Abdominal includes Renal, GYN/Pelvic.
  - [2] Small organ includes breast, testes and thyroid
  - [3] Elastography Imaging Elasticity.
  - [4] Other use includes Urology/Prostate
  - [5] 3D/4D Imaging mode
  - [6] Needle guidance imaging
  - [7] Includes infertility monitoring of follicle development
  - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
  - [9] Volume navigation
  - [10] Shear wave elastography
  - [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
  - System provides real-time 3D and 4D acquisition when used with special 4D probes

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#### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with C2-9VN-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

						Mode of	Operatio	n			
Clinical Application	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Anatomy/Region of Interest	+		l	- ''	<u> </u>						
Ophthalmic [7]	<del> </del>										
Fetal/Obstetrics <sup>[7]</sup>	N	N	N	N	N	N	N	N	N	N	[5,6,9]
Abdominal <sup>[1]</sup>	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Pediatric	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Small Organ <sup>[2]</sup>											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other <sup>[4]</sup>	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative <sup>[8]</sup>											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### Diagnostic Ultrasound Indications for Use Form GE LOGIQ E9 with C1-6VN-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

OP also I Assalls at the	Mode of Operation													
Clinical Application  Anatomy/Region of Interest	В	М	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]			
Ophthalmic														
Fetal/Obstetrics <sup>[7]</sup>	N	N	N	N	N	N	N	N	N	N	[5,6,9]			
Abdominal <sup>[1]</sup>	N	N	N	N	N	N	N	N	N	N	[3,5,6,9,10]			
Pediatric	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]			
Small Organ <sup>[2]</sup>														
Neonatal Cephalic														
Adult Cephalic														
Cardiac Adult														
Cardiac Pediatric														
Peripheral Vascular	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]			
Musculo-skeletal Conventional														
Musculo-skeletal Superficial														
Other <sup>[4]</sup>	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]			
Exam Type, Means of Access														
Transesophageal														
Transrectal														
Transvaginal														
Transurethral														
Intraoperative <sup>[8]</sup>														
Intraoperative Neurological														
Intravascular														
Laparoscopic														

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes Renal, GYN/Pelvic.

- [2] Small organ includes breast, testes and thyroid
- [3] Elastography Imaging Elasticity.
- [4] Other use includes Urology/Prostate
- [5] 3D/4D Imaging mode
- [6] Needle guidance imaging
- [7] Includes infertility monitoring of follicle development
- [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
- [9] Volume navigation
- [10] Shear wave elastography
- [\*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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### GE Healthcare

#### 510(k) Premarket Notification Submission

#### 510(k) Summary

In accordance with 21 CFR 807.92 the following summary of information is provided:

Date: July 17, 2014

Submitter/Manufacturer: GE Healthcare, GE Medical Systems Ultrasound and Primary

Care Diagnostics, LLC. 9900 Innovation Dr. Wauwatosa, WI 53226

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Device: Trade Name: GE LOGIQ E9 Diagnostic Ultrasound System

Common/Usual Name: LOGIQ E9

Classification Names: Ultrasonic Pulsed Doppler Imaging System, 21 CFR 892.1550, 90-IYN

Ultrasonic Pulsed Echo Imaging System, 21 CFR 892.1560, 90-IYO

Product Code: Diagnostic Ultrasound Transducer, 21 CFR 892.1570, 90-ITX

Predicate Device(s): K123564 GE LOGIQ E9 Diagnostic Ultrasound System

K132274 SuperSonic Imagine, Aixplorer Diagnostic Ultrasound

System

Device Description: The LOGIQ E9 is a full featured, general purpose diagnostic

ultrasound system which consists of a mobile console

approximately 58 cm wide, 86cm deep and 141 cm high that provides digital acquisition, processing and display capability. The user interface includes a computer keyboard, specialized controls, 10-inch LCD touch screen and color 19-inch LCD

image display.

Intended Use: The device is intended for use by a qualified physician for

ultrasound evaluation of Fetal; Abdominal; Pediatric; Small Organ (breast, testes, thyroid); Neonatal Cephalic; Adult Cephalic; Cardiac (adult and pediatric); Peripheral Vascular; Musculo-skeletal Conventional and Superficial; Urology

(including prostate); Transrectal; Transvaginal; Transesophageal

and Intraoperative (abdominal, thoracic and vascular).



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#### 510(k) Premarket Notification Submission

Technology:

The LOGIQ E9 employs the same fundamental scientific technology as its predicate device(s).

### <u>Determination of</u> Substantial Equivalence:

#### Comparison to Predicates

The LOGIQ E9 is substantially equivalent to the predicate devices with regard to intended use, imaging capabilities, technological characteristics and safety and effectiveness.

- The systems are all intended for diagnostic ultrasound imaging and fluid flow analysis.
- The LOGIQ E9 and predicate LOGIQ E9 systems have the same clinical intended use.
- The LOGIQ E9 and predicate LOGIQ E9 systems have the same imaging modes with the exception of Shear Wave elastography which is substantially equivalent to SuperSonic Imagine Aixplorer (K132274).
- The LOGIQ E9 and predicate LOGIQ E9 systems transducers are identical except for the C1-6VN-D, C2-9-VN-D which are an incremental improvement to the existing C1-6-D and C-2-9-D transducers and are equivalent.
- The systems are manufactured with materials which have been evaluated and found to be safe for the intended use of the device.
- The systems have acoustic power levels which are below the applicable FDA limits.
- The LOGIQ E9 and predicate LOGIQ E9 systems have similar capability in terms of performing measurements, capturing digital images, reviewing and reporting studies.
- The LOGIQ E9 and predicate systems have been designed in compliance with approved electrical and physical safety standards.

#### **Summary of Non-Clinical Tests:**

The device has been evaluated for acoustic output, biocompatibility, cleaning and disinfection effectiveness as well as thermal, electrical, electromagnetic and mechanical safety, and has been found to conform with applicable medical device safety standards. The LOGIQ E9 and its applications comply with voluntary standards:

 AAMI/ANSI ES60601-1, Medical Electrical Equipment – Part 1: General Requirements for Safety



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#### 510(k) Premarket Notification Submission

- IEC60601-1-2,Medical Electrical Equipment Part 1-2:General Requirements for Safety – Collateral Standard: Electromagnetic Compatibility Requirements and Tests
- 3. IEC60601-2-37, Medical Electrical Equipment Part 2-37:Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment
- 4. NEMA UD 3, Standard for Real Time Display of Thermal and Mechanical Acoustic Output Indices on Diagnostic Ultrasound Equipment
- 5. ISO10993-1, Biological Evaluation of Medical Devices- Part 1: Evaluation and Testing
- 6. NEMA UD 2, Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment
- 7. ISO14971, Application of risk management to medical devices: Second edition
- 8. NEMA Digital Imaging and Communications in Medicine (DICOM) Set. (Radiology)

The following quality assurance measures are applied to the development of the system:

- Risk Analysis
- Requirements Reviews
- Design Reviews
- Testing on unit level (Module verification)
- Integration testing (System verification)
- Performance testing (Verification)
- Safety testing (Verification)
- Final Acceptance testing (Validation)

### **Summary of Clinical Tests:**

The subject of this premarket submission, LOGIQ E9, did not require clinical studies to support substantial equivalence.

Conclusion:

GE Healthcare considers the LOGIQ E9 to be as safe, as effective, and performance is substantially equivalent to the predicate device(s).